

# SEQUENCE LISTING

<110> RIKEN

<120> Method of producing template DNA and method of producing protein in cell-free protein synthesis system using the same

<130> RFH13-091T

<140> PCT/JP02/06261

<141> 2002-06-24

<150> JP P2001-201356

<151> 2001-07-02

<160> 24

<170> PatentIn version 3.1

<210> 1

<211> 20

<212> PRT

<213> Artificial Sequence

<220>

<223> native His tag

<400> 1

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Ala His Asn Lys  
20

<210> 2

<211> 605

<212> DNA

<213> Artificial Sequence

<220>

<223> double stranded linear DNA coding for Ras protein

<400> 2

ggcgtataca tatgaccgaa tacaaactgg ttgtagttgg cgctggtggt gtaggcaaaa 60

gcgcgtgac caticagttg atccagaacc acttcgtaga tgagtacgac ccgactattg 120  
 aagactctta ccgtaagcag gtigtatcg acggtgagac ctgtttgctg gacatccttg 180  
 ataccgcagg ccaagaagaa tactctgcta tgcgtgatca gtatatgcgt accggcgaag 240  
 gcttctcttg cgttttcgct atcaacaaca ccaaattctt tgaagacatc catcaatacc 300  
 gtgaacagat caaacgtgtt aaagactctg atgacgttcc gatggttctg gttggtaaca 360  
 aatgcgactt ggcagcgct actgttgaat ctgctcaggc tcaggatctg gctcgttctt 420  
 acggaattcc gtacatcgaa acctctgcta aaactcgta aggcggtgaa gacgctttct 480  
 acaccttggt tcgtgaaatc cgtcagcaca agctgcgtaa gctttgatag aattccgtga 540  
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 ccgct 605

<210> 3  
 <211> 19  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> 5' primer-1 universal

<400> 3  
 ccgaaggagc cgccaccat 19

<210> 4  
 <211> 40  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> 5' primer-2 for Ras

<400> 4  
 gaaggagccg ccaccatgac cgaatacaaa ctggtttag 40

<210> 5  
 <211> 26  
 <212> DNA

<213> Artificial Sequence

<220>

<223> 3' primer universal

<400> 5

gcggataaca atttcacaca ggaaac

26

<210> 6

<211> 844

<212> DNA

<213> Artificial Sequence

<220>

<223> 5' DNA fragment comprising GST tag sequence

<400> 6

ccgctgtcct cgttcccagc ccatgattac gaattcagat ctcgatcccg cgaaattaat 60

acgactcact atagggagac cacaacggtt tccctctaga aataattttg tttaacttta 120

agaaggagat atacatatgt cccctatact aggttattgg aaaattaagg gccttgtgca 180

accactcga cttcttttgg aatatcttga agaaaaatat gaagagcatt tgtatgagcg 240

cgatgaaggt gataaatggc gaaacaaaaa gtttgaattg ggtttggagt ttccaatct 300

tccttattat attgatggtg atgttaaatt aacacagtct atggccatca tacgttatat 360

agctgacaag cacaacatgt tgggtggttg tccaaaagag cgtgcagaga tttcaatgct 420

tgaaggagcg gttttggata ttagatacgg tgtttcgaga attgcatata gtaaagactt 480

tgaaactctc aaagttgatt ttcttagcaa gctacctgaa atgctgaaaa tgttcgaaga 540

tcgtttatgt cataaaacat atttaaattg tgatcatgta acccatcctg acttcatgtt 600

gtagtacgct cttgatgttg ttttatacat ggacceaatg tgcctggatg cgttcccaaa 660

attagtttgi tttaaaaaac gtattgaagc tateccacaa attgataagt acttgaaatc 720

cagcaagiat atagcatggc ctttgcaggg ctggcaagcc acgtttggtg gtggcgacca 780

tcctccaaaa tcggatagct ctggcgccct cctgggtgcca cgcggatccg aaggagccgc 840

cacc 844

<210> 7  
 <211> 217  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> 5' DNA fragment comprising His tag sequence

<400> 7  
 ccgctgtcct cgttcccagc ccatgattac gaattcagat ctcgatcccg cgaaattaat 60  
 acgactcact ataggagac cacaacggtt tccctctaga aataattttg tttaacttta 120  
 agaaggagat atacatatga aaggcagcag ccatcatcat catcatcaca gcagcggcgc 180  
 ctccctgggtg ccacgcggat ccgaaggagc cgccacc 217

<210> 8  
 <211> 244  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> 5' DNA fragment comprising native His tag sequence

<400> 8  
 ccgctgtcct cgttcccagc ccatgattac gaattcagat ctcgatcccg cgaaattaat 60  
 acgactcact ataggagac cacaacggtt tccctctaga aataattttg tttaacttta 120  
 agaaggagat atacatatga aagatcatct catccacaat gtccacaaag aggagcacgc 180  
 tcatgccac aacaagagct ctggcgccct cctgggtcca cgcggatccg aaggagccgc 240  
 cacc 244

<210> 9  
 <211> 652  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> 5' DNA fragment comprising CBD

<400> 9

ccgctgtcct cgttcccagc ccatgattac gaattcagat ctcgatcccg cgaaattaat	60
acgactcact atagggagac cacaacggtt tccctctaga aataattttg tttacttta	120
agaaggagat atacatatgt cagttgaatt ttacaactct aacaaatcag cacaacaaa	180
ctcaattaca ccaataatca aaattactaa cacatctgac agtgatttaa atttaaatga	240
cgtaaaagtt agatattatt acacaagtga tggtagacaa ggacaaactt tctgggtga	300
ccatgctggt gcattattag gaaatagcta tgttgataac actagcaaag tgacagcaaa	360
cttcgttaaa gaaacagcaa gccaacatc aacctatgat acatatgttg aatttggatt	420
tgcaagcgga gcagctactc ttaaaaaagg acaatttata actattcaag gaagaataac	480
aaaatcagac tgggtcaaac acactcaaac aaatgactat tcattigatg caagtagtic	540
aacaccagtt gtaaatccaa aagttacagg atatataggt ggagctaaag ttcttggtag	600
agcaagctct ggcgccctccc tggtagccacg cggatccgaa ggagccgcca cc	652

<210> 10

<211> 511

<212> DNA

<213> Artificial Sequence

<220>

<223> 5' DNA fragment comprising Thioredoxin sequence

<400> 10

ccgctgtcct cgttcccagc ccatgattac gaattcagat ctcgatcccg cgaaattaat	60
acgactcact atagggagac cacaacggtt tccctctaga aataattttg tttacttta	120
agaaggagat atacatatga gcgataaaat tattcacctg actgacgaca gttttgacac	180
ggatgtactc aaagcggacg gggcgatcct cgtcgatttc tgggcagagt ggtgcggtcc	240
gtgcaaaatg atcgccccga ttctggatga aatcgctgac gaatatcagg gcaaactgac	300
cgttgcaaaa ctgaacatcg atcaaaaccc tggcactgcg ccgaaatatg gcatccgttg	360
tatcccgact ctgctgctgt tcaaaaacgg tgaagtggcg gcaaccaaag tgggtgcact	420
gtctaaaggt cagttgaaag agttccctga cgctaacctg gccagctctg gcgcctccct	480

ggtgccacgc ggatccgaag gagccgccac c 511

<210> 11  
 <211> 183  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> 3' DNA fragment comprising T7 terminator

<400> 11  
 gtttcctgtg tgaaattgtt atccgctgct gagttggctg ctgccaccgc tgagcaataa 60  
 ctagcataac cccctggggc ctctaaacgg gtcttgaggg gttttttgct gaaaggagga 120  
 actatataccg gataacctcg agctgcaggc atgcaagcct ggggctggga acgaggacag 180  
 cgg 183

<210> 12  
 <211> 22  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> universal primer for 2nd PCR

<400> 12  
 gccgctgtcc tcgttcccag cc 22

<210> 13  
 <211> 760  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> double stranded linear DNA coding for CAT protein

<400> 13  
 ggcgtataca tatggagaaa aaaatcactg gatataccac cgttgatata tcccaatggc 60  
 atcgtaaaga acattttgag gcatttcagt cagttgctca atgtacctat aaccagaccg 120  
 ttcagctgga tattacggcc tttttaaaga ccgtaaagaa aaataagcac aagttttatc 180

cgccctttat tcacattctt gcccgcciga tgaatgctca tccggaattc cgtatggcaa 240  
 tgaaagacgg tgagctgggtg atatgggata gigtaccac tigtacacc gttttccatg 300  
 agcaactga aacgttttca tcgtcttgga gtgaatacca cgacgatttc cggcagtttc 360  
 tacacatata ttgcaagat gtggcgtgtt acggtgaaaa cctggcctat ttccctaaag 420  
 ggtttattga gaataatgtt ttctctcag ccaatccctg ggtgagtttc accagttttg 480  
 atttaaactg ggccaatatg gacaacttct tcgccccctg ttccacatg ggcaaatatt 540  
 atacgcaagg cgacaagggtg ctgatgccgc tggcgattca ggttcatcat gccgtctgtg 600  
 atggcttcca tgtcggcaga atgcittaatg aattacaaca gtactgcgat gaggggcagg 660  
 gcggggcgta attttttttaa ggcagttatt ggtgccctta aacgtcgacc ggctgctaac 720  
 aaagcccgaa agggtttctt gtgtgaaatt gttatccgct 760

<210> 14  
 <211> 41  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> 5' primer-2 for CAT

<400> 14  
 gaaggagccg ccaccatgga gaaaaaaatc actggatata c 41

<210> 15  
 <211> 36  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> 5' primer-2 for 1A2

<400> 15  
 gaaggagccg ccaccatgct caaagtcacg gtgcc 36

<210> 16  
 <211> 35  
 <212> DNA

<213> Artificial Sequence

<220>

<223> 5' primer-2 for 1B2

<400> 16

gaaggagccg ccaccatgga ggagcagcgc tgttc

35

<210> 17

<211> 35

<212> DNA

<213> Artificial Sequence

<220>

<223> 5' primer-2 for 1C8

<400> 17

gaaggagccg ccaccatggc ccgaaccaag cagac

35

<210> 18

<211> 38

<212> DNA

<213> Artificial Sequence

<220>

<223> 5' primer-2 for 1D2

<400> 18

gaaggagccg ccaccatggg tgttgacaaa atcattcc

38

<210> 19

<211> 37

<212> DNA

<213> Artificial Sequence

<220>

<223> 5' primer-2 for 1D9

<400> 19

gaaggagccg ccaccatggt ggagacctac agcaacc

37

<210> 20

<211> 34

<212> DNA



<213> Artificial Sequence

<220>

<223> 5' primer-2 for 1D10

<400> 20

gaaggagccg ccaccatggc ggtgcaggtg gtgc

34

<210> 21

<211> 36

<212> DNA

<213> Artificial Sequence

<220>

<223> 5' primer-2 for 1E4

<400> 21

gaaggagccg ccaccatgga tgatcgggag gatctg

36

<210> 22

<211> 36

<212> DNA

<213> Artificial Sequence

<220>

<223> 5' primer-2 for 1G4

<400> 22

gaaggagccg ccaccatgic gagttattct agtgac

36

<210> 23

<211> 36

<212> DNA

<213> Artificial Sequence

<220>

<223> 5' primer-2 for 1H1

<400> 23

gaaggagccg ccaccatggt gaaggtcggc gtgaac

36

<210> 24

<211> 32

<212> DNA

<213> Artificial Sequence

<220>

<223> 5' primer-2 for 1H5

<400> 24

gaaggagccg ccacatggc caacagtgag cg

32